

TABLE 6-1
Transportation-Related Land Use STRATEGY PACKAGES for *URBAN AREAS*

STRATEGY DESCRIPTION	<u>Urban Level 1</u> (Performance Goal:*) <i><10,000 annual VMT/HH)</i>	<u>Urban Level 2</u> (Performance Goal:*) <i>10,000 - 13,000 VMT/HH/yr.)</i>	<u>Urban Level 3</u> (Performance Goal:*) <i>13,000 - 16,000 VMT/HH/yr.)</i>	SUPPORTIVE FACTORS
-----------------------------	---	---	---	---------------------------

STRATEGY CHARACTERISTICS:

1. Strengthen Downtowns Single or predominant city center that incorporates a primary employment center, with supporting housing, commercial, and region-serving public/cultural uses	Locate significant retail, office, conference, housing, public service and entertainment activities downtown.	<i>Same as for Urban Level 1</i>	<i>Same as for Urban Level 1</i>	<ul style="list-style-type: none"> - Direct pedestrian routes to surrounding neighborhoods - Pedestrian facilities within the downtown - Excellent local and regional transit connections - Commercial buildings oriented to the sidewalk
2. Develop Concentrated Activity Centers Primary employment concentrated in a limited number of carefully planned centers with functionally-integrated complementary uses, including residential units	The number of Concentrated Activity Centers will vary with the size of the jurisdiction and the metropolitan area.	<i>Same as for Urban Level 1</i>	<i>Same as for Urban Level 1</i>	<ul style="list-style-type: none"> - Auto-oriented uses discouraged for internal circulation - Pedestrian facilities - Provision of services for employees - Transit service - Proximity to residential areas

* Performance Goal Level: Average Vehicle Miles Traveled per Household per Year

TABLE 6-1
Transportation-Related Land Use STRATEGY PACKAGES for *URBAN AREAS*

STRATEGY DESCRIPTION	Urban Level 1 (Performance Goal: * <10,000 annual VMT/HH)	Urban Level 2 (Performance Goal: * 10,000 - 13,000 VMT/HH/yr.)	Urban Level 3 (Performance Goal: * 13,000 - 16,000 VMT/HH/yr.)	SUPPORTIVE FACTORS
----------------------	--	---	---	--------------------

STRATEGY CHARACTERISTICS:

3. Encourage Mixed-Use Development Mixed-use residential and commercial development. Vertical and horizontal mixed-use (e.g., within and between buildings)	Goals for larger sites; minimum % of gross floor area: Office center: - Office 45% - Retail 10% - Public 5% Retail-cultural center: - Retail, hotel, entertainment 30% - Office 10% - Public 10% - Residential 5% Neighborhood center: - Residential 20% - Retail 15% - Public 15% - Office 10% Residential area: - Residential 30% - Retail 10% - Public 10% - Office 5%	Goals for larger sites; minimum % of gross floor area: Office center: - Office 40% - Retail 10% - Public 5% - Residential 5% Retail-cultural center: - Retail, hotel, entertainment 25% - Office 10% - Public 10% - Residential 10% Neighborhood center: - Residential 20% - Retail 15% - Public 15% - Office 10% Residential area: - Residential 35% - Retail 10% - Public 10% - Office 5%	Goals for larger sites; minimum % of gross floor area: Office center: - Office 35% - Retail 10% - Public 5% - Residential 10% Retail-cultural center: - Retail, hotel, entertainment 25% - Office 10% - Public 10% - Residential 10% Neighborhood center: - Residential 30% - Retail 15% - Public 15% Residential area: - Residential 40% - Retail 10% - Public 10%	<ul style="list-style-type: none"> - Pedestrian and bicycle facilities - Interconnected street pattern - Services within walking and bicycling distance of workplaces (1/4 to 1/2 mile)

* Performance Goal Level: Average Vehicle Miles Traveled per Household per Year

Urban Strategies

Chapter 6

"Transportation-Related Land Use Strategies to Minimize Motor Vehicle Emissions"

TABLE 6-1
Transportation-Related Land Use STRATEGY PACKAGES for *URBAN AREAS*

STRATEGY DESCRIPTION	Urban Level 1 (Performance Goal:*) <10,000 annual VMT/HH)	Urban Level 2 (Performance Goal:*) 10,000 - 13,000 VMT/HH/yr.)	Urban Level 3 (Performance Goal:*) 13,000 - 16,000 VMT/HH/yr.)	SUPPORTIVE FACTORS
----------------------	--	--	--	--------------------

STRATEGY CHARACTERISTICS:

4. Encourage Infill and Densification Infill development creates clusters of higher residential density and adds employment to jobs-poor urbanized areas	Density at a minimum of <u>32 or more dwelling units/net</u> residential acre, on average.	Density at a minimum of <u>22 or more dwelling units/net</u> residential acre, on average.	Density at a minimum of <u>18 or more dwelling units/net</u> residential acre, on average.	<ul style="list-style-type: none"> - Pedestrian and bicycle facilities - Interconnected streets - Employment centers and retail services near residential clusters - Transit service to residential clusters
5. Increase Density Near Transit Corridors Compact residential and commercial uses within 1/4 to 1/2 mile of major transit corridors	Residential density: minimum of <u>50 dwelling units/net</u> ¹ residential acre, on average. Commercial intensity: minimum of <u>330 employees</u> per net commercial acre, except theaters and hotels. (Floor Area Ratio (FAR) of <u>2.0</u>). ²	Residential density: minimum of <u>32 dwelling units/net</u> residential acre, on average. Commercial intensity: minimum of <u>310 employees</u> per net commercial acre, except theaters and hotels. (FAR of <u>1.9</u>).	Residential density: minimum of <u>22 dwelling units/net</u> residential acre, on average. Commercial intensity: minimum of <u>290 employees</u> per net commercial acre, except theaters and hotels. (FAR of <u>1.8</u>).	<ul style="list-style-type: none"> - Pedestrian facilities - 15-min. transit ³ headways or less, especially in peak periods - Multiple bus routes - Interconnected streets - New auto-oriented uses discouraged along corridor

¹ number of dwelling units per residentially-zoned acre (excluding commercial and other uses, streets, open space, etc.)

² **FAR** = 'Floor Area Ratio' - the ratio of building floor area to the area of the parcel or lot, including parking areas.

³ Transit headway = frequency of transit service to a particular location.

* Performance Goal Level: Average Vehicle Miles Traveled per Household per Year

TABLE 6-1
Transportation-Related Land Use STRATEGY PACKAGES for *URBAN AREAS*

STRATEGY DESCRIPTION	Urban Level 1 (Performance Goal:*) <10,000 annual VMT/HH)	Urban Level 2 (Performance Goal:*) 10,000 - 13,000 VMT/HH/yr.)	Urban Level 3 (Performance Goal:*) 13,000 - 16,000 VMT/HH/yr.)	SUPPORTIVE FACTORS
----------------------	--	--	--	--------------------

STRATEGY CHARACTERISTICS:

6. Increase Density Near Transit Stations Compact residential and commercial uses within 1/4 to 1/2 mile of significant stations	Residential density: At least 70 dwelling units/net residential acre, on average. Commercial intensity: minimum of 360 employees per net commercial acre, except theaters and hotels. (Floor Area Ratio (FAR): 2.2)	Residential density: At least 50 dwelling units/net residential acre, on average. Commercial intensity: minimum of 340 employees per net commercial acre, except theaters and hotels. (FAR about 2.1)	Residential density: At least 40 dwelling units/net residential acre, on average. Commercial intensity: minimum of 330 employees per net commercial acre, except theaters and hotels. (FAR about 2.0)	<ul style="list-style-type: none"> - Pedestrian facilities - 15-min transit headways or less - New auto-oriented uses discouraged near stations
7. Provide Pedestrian Facilities Direct, accessible pedestrian routes to encourage walking	<u>Design features include:</u> <ul style="list-style-type: none"> - crosswalks and pedestrian-actuated traffic signals - wide sidewalks (5-10 ft) - protection from fast vehicular traffic - short block-faces - minimal building setbacks - on-street entries to buildings 	<u>Design features:</u> same as for Urban Level 1	<u>Design features:</u> same as for Urban Level 1	<ul style="list-style-type: none"> - Neighborhood services within 1/2 mile of most residences - Direct connections for pedestrians and bicycles - Interconnected street pattern - Routes that link compact, clustered development - Traffic calming measures

* Performance Goal Level: Average Vehicle Miles Traveled per Household per Year

TABLE 6-1
Transportation-Related Land Use STRATEGY PACKAGES for *URBAN AREAS*

STRATEGY DESCRIPTION	Urban Level 1 (Performance Goal: * <10,000 annual VMT/HH)	Urban Level 2 (Performance Goal: * 10,000 - 13,000 VMT/HH/yr.)	Urban Level 3 (Performance Goal: * 13,000 - 16,000 VMT/HH/yr.)	SUPPORTIVE FACTORS
----------------------	---	--	--	--------------------

STRATEGY CHARACTERISTICS:

8. Develop Interconnected Travel Network Regular grid or other inter-connected street system	Encourage multiple streets over isolated, hierarchical multi-lane arterials	<i>Same as for Urban Level 1</i>	<i>Same as for Urban Level 1</i>	<ul style="list-style-type: none"> - Pedestrian/bicycle connections - Short blocks
9. Provide Strategic Parking Facilities Reduced parking supply to reflect the increased transit use and walking/bicycling occurring as a result of implemented strategies. Management of parking should vary by land use type and proximity to transit service. Parking should facilitate, not inhibit, walking and transit use.	<u><i>Design features include:</i></u> <ul style="list-style-type: none"> - Workplace parking managed at all locations - Supply does not exceed demand - On-street parking controlled - Parking shared among uses - Priority parking for bicycles, carpools, vanpools and 'zero-emission' vehicles 	<i>Same as for Urban Level 1</i>	<i>Same as for Urban Level 1</i>	<ul style="list-style-type: none"> - Pedestrian and bicycle facilities - Mixed uses within walking distance - Transit service (amount varies by situation)

* Performance Goal Level: Average Vehicle Miles Traveled per Household per Year

Urban Strategies
Chapter 6

"Transportation-Related Land Use Strategies to Minimize Motor Vehicle Emissions"

TABLE 6-1a

**Case Study Examples of
*URBAN COMMUNITIES***

SAMPLE COMMUNITY	REGIONAL LOCATION	AVERAGE VMT Per Household Per Year	PERFORMANCE GOALS: Average Vehicle Miles of Travel per Household per Year
San Francisco (downtown and nearby areas)	San Francisco (SF) Bay Area	5,500	Urban Level 1: (<10,000)
Sacramento (central area)	Sacramento	10,100	Urban Level 2: (10,000 to 13,000)
San Francisco (total)	SF Bay Area	11,300	
Berkeley (central area)	SF Bay Area	12,500	
Beverly Hills (southwestern)	Los Angeles	13,000	
Rockridge District (Oakland)	SF Bay Area	14,300	Urban Level 3: (13,001 to 16,000)
Santa Monica (southern area)	Los Angeles	14,700	
Long Beach (southern area)	Los Angeles	15,300	
San Diego (Uptown area)	San Diego	15,500	

* Sources: JHK & Associates, *Transportation-Related Land Use Strategies to Minimize Mobile Source Emissions*, 1995, Table 5-2. Source of community data: Dr. John Holtzclaw, *Using Residential Patterns and Transit to Decrease Auto Dependence and Costs*, June 1994. (Community data was grouped and annotated by JHK & Associates and ARB staff.)